

August 2011

SECTION III

PASTURE

PLANNING RESOURCE MANAGEMENT SYSTEMS (RMS)

Successful resource management on pastureland is the correct application of a combination of practices that will meet the needs of the pastureland ecosystem, the soil, water, air, plant, and animal resources, and the objectives of the land user.

The minimum criteria that must be met on pastureland for each of the resource concerns is explained in Section III of the Field Office Technical Guide.

In planning a pastureland Resource Management Systems (RMS), the vegetative management practice prescribed grazing is the foundation on which the **RMS** is built. **Prescribed grazing** (proper grazing heights and timing) is essential to the proper management of pastureland. A grazing management plan that balances the forage and feed to the animal numbers and describes the animal movement through the pastures that meets the needs of the plants, animals, soil, water and air is essential to the formulation of **RMS** on pastureland. **Water** for the animals of concern must be provided, thus making natural water or watering facilities essential to a pastureland **RMS**.

- **Irrigation Water Management** (449) is an **ESSENTIAL** practice when pastureland is irrigated. Practices such as **Irrigation Systems** (441 thru 447), Pipeline (516), and **Irrigation Land Leveling** (464) may be **NEEDED** to complete the **RMS**.
- **Integrated Pest Management** (595) is **ESSENTIAL** when pests are present at levels where control is warranted in the management unit.
- **Nutrient Management** (590) is **ESSENTIAL** when inorganic or organic nutrients are applied to the management unit.

All other practices planned on pastureland are to either: (1) facilitate the application of the grazing management plan and are identified as **DESIRABLE** practices, or (2) establish, renovate, more intensively manage, or accelerate changes in the pasture and are identified as **NEEDED** practices. These **NEEDED** practices are planned when necessary to treat specific resource problems to meet the criteria for managing the soil, water, air, plant, and animal resources.

Resource Management System include combination of practices that are:

1. **ESSENTIAL – Prescribed Grazing** and **water** for animals of concern are essential to successful management of pastureland and is always planned in the **RMS**.
2. **NEEDED** - These practices are planned when necessary to establish, renovate or more intensively manage the pasture, or accelerate changes in the pasture by treating specific resource problems to meet the **RMS** criteria.
3. **DESIRABLE** - These practices facilitate or enhance the vegetative management practices.

An **RMS** is developed by selecting a combination of the **ESSENTIAL**, plus the **NEEDED** and/or **DESIRABLE** practices, or both, whose combined effects will meet the criteria for each resource (soil, water, air, plant, animal and human) and the objectives of the land user. The following is a list of **ESSENTIAL** and **NEEDED** and/or **DESIRABLE** practices applicable to pastureland. The following list of practices is not all inclusive, there may be other practices appropriate for inclusion under **NEEDED** and/or **DESIRABLE** on a plan by plan basis or as technology changes.

Table 1

ESSENTIAL PASTURELAND PRACTICES		
Practice Name	Practice Code	Need
Prescribed Grazing	528	
Water Facilities ¹ /	614	
Pest Management (if pests are controlled)	595	AND
Nutrient Management (if fertilizer or manure is used)	590	AND
Irrigation Water Management (if irrigated)	449	
Forage Harvest Management (if forage is also harvested mechanically)	511	

Table 2

NEEDED and/or DESIRABLE Practices	
Practice Name	Practice Code
Access Road	560
Animal Trails and Walkways	575
Brush Management	314
Critical Area Treatment	342
Diversion	362
Fence	382
Forage and Biomass Planting	512
Grade Stabilization Structure	410
Herbaceous Weed Control	315
Irrigation Land Leveling	464
Irrigation Pit or Regulating Reservoir	552
Irrigation Storage Reservoir	436
Irrigation System	443
Irrigation Water Conveyance	428 or 430
Irrigation Water Management	449
Land Clearing	460
Nutrient Management	590
Pest Management	595
Pipeline	516
Pond	378
Pond Sealing or Lining	521
Prescribed Burning	338
Sediment Basin	350
Spring Development	574
Structure for Water Control	587
Upland Wildlife Habitat Management	645
Waste Management System	
Water and Sediment Control Basin	638
Water Spreading	640
Water Well	642
Wetland Wildlife Habitat Management	644
Windbreak/Shelterbelt Establishment/Renovation	380 or 650

^{1/} The first water in pasture for animal use

SECTION III
RESOURCE MANAGEMENT SYSTEMS GUIDANCE DOCUMENT (Example)

RESOURCE SETTING	RESOURCE PROBLEMS
MLRA 36 WP-3 paymaster, sandy loam, 16 acres pasture – fertilized – cow/calf operation year long with supplement feeding November- March	SOIL: - Minor water erosion – concentrated flow erosion along cow trails WATER: - Impaired surface water quality due to excess run-off AIR: - None identified PLANT: - Poor production – low forage value – weeds ANIMAL: - Grazing distribution problem OTHER: - None identified

RMS #1	Practice #	Soil			Water			Plant					Animal		
		Sheet and Rill Erosion	Concentrated Flow Erosion		Ponding/Flooding	Surface Water Qlty		Nutrient Mgt.	Pest Mgt.	Health & Vigor	Productivity		Water (Domestic Livestock Drinking)	Pop./Resource Bal.	
Forage and Biomass Planting	512	+	+		+	+		0	+	+	+		0	+	
Prescribed Grazing	528	+	+		+	+		+	+	+	+		0	+	
Watering Facility	614	0	0		0	0		0	0	0	0		+	+	
Nutrient Management	680	N/A	N/A		N/A	+		+	+	+	+		N/A	+	
Irrigation System	443	+	+		0	+		+	+	+	+		N/A	0	
Irrigation Water Mgt.	449	+	+		+	+		+	+	+	+		N/A	N/A	

RMS #2																
Forage and Biomass Planting	512	+	+		+	+			0	+	+	+		0	+	
Prescribed Grazing	528	+	+		+	+			+	+	+	+		0	+	
Fencing	382	N/A	N/A		N/A	N/A			N/A	F	F	F		F	F	
Pond	378	+	+		+	+			N/A	N/A	0	0		+	+	
Nutrient Management	680	N/A	N/A		N/A	+			+	+	+	+		N/A	+	
Irrigation System	443	+	+		0	+			+	+	+	+		N/A	0	
Irrigation Water Mgt.	449	+	+		+	+			+	+	+	+		N/A	N/A	

(+) positive effect (-) negative effect (0) none or negligible effect (f) facilitating practice (n/a) practice not applicable